

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 12/18/2003

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,003		05/14/2001	Chii-How Chang	DE 2309.02 US	1199
22887	7590	12/18/2003		EXAMINER	
		SOCIATES	CHU, KIM KWOK		
INTELLECTUAL PROPERTY DEVELOPMENT 2355 MAIN STREET, SUITE 200				ART UNIT	PAPER NUMBER
IRVINE, C				2653	1.7/

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	09/855,003	CHANG, CHII-HOW					
Office Action Summary	Examiner	Art Unit					
:	Kim-Kwok CHU	2653					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address							
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	86(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
1) Responsive to communication(s) filed on Pre-A	mendment filed on 9/25/03; pap	<u>er 10</u> .					
2a) This action is <b>FINAL</b> . 2b) ⊠ This a	action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-11 and 13-24</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-11 and 13-24</u> is/are rejected.							
7) Claim(s) is/are objected to.	election requirement						
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. §§ 119 and 120							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1 Certified copies of the priority documents		n)-(d) or (f).					
<ul><li>2. Certified copies of the priority documents</li><li>3. Copies of the certified copies of the prior application from the International Bureau</li></ul>	s have been received in Applicati ity documents have been receive						
* See the attached detailed Office action for a list of the certified copies not received.  13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) The translation of the foreign language provisional application has been received.							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.							
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) Patent Application (PTO-152)					
A STATE OF THE STA							

## Claim Objections

- 1. Claim 13 is objected to because of the following informalities:
- (a) in claim 6, line 2, the term "said magnet assembly" should be changed to --said magnetic assembly-- accordingly to claim 1; and
- (b) in claim 13, line 2, the term "according to claim 12" should be corrected because claim 12 is cancelled by Applicant in the Amendment filed on 9/25/03.

Appropriate correction is required

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United State..

3. Claims 1-11 and 13-18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kasahara et al. (U.S. Patent 5,206,762).

Kasahara teaches a magnetic position device having all the elements and means as recited in claims 1-5 and 7-18. For example, Kasahara teaches the following:

- (a) as in claim 1, a movable element 2 having a yoke assembly 20 (Fig. 1; yoke is a U shape assembly which houses the coil 9a);
- (b) as in claim 1, a fixed element 8 adjacent to the movable element 2 for generating a magnetic field to control the movable element 2 to be moved toward a position (Fig. 1; objective lens is moved/focused by the movable element 2);
- (c) as in claim 1, the fixed element 8 having a magnetic assembly which comprises one or more permanent magnets 13a connects to a second yoke assembly 11a configured to generate a magnetic filed (Fig. 1; column 3, lines 51-67);
- (d) as in claim 2, a first coil 9a for generating a first motive force in a first direction in response to the magnetic flux of the magnetic field (Fig. 1; the first coil is a focusing coil, column 3; lines 41 and 42);
- (e) as in claim 2, a second coil 10a for generating a second motive force in a second direction in response to the magnetic flux of the magnetic field (Fig. 1; the second coil is a tracking coil; column 3, lines 43 and 44);
- (f) as in claim 3, the second coil 10a is perpendicular to
  the first coil 9a (Fig. 3);

- (g) as in claim 4, the second direction is perpendicular to the first direction (Figs. 1 and 3; inherent feature where the second tracking direction is perpendicular to the first focusing direction);
- (h) as in claim 5, the first coil 9a and the second coil10a are winded around the second yoke assembly 11a (Fig. 1);
- (i) as in claim 6, the magnetic assembly comprises a plurality of permanent magnets 13a and 13b (Fig. 1; column 3, lines 67 and 68);
- (j) as in claim 7, the movable element 2 is capable of being moved along the first direction by the first motive force acted on the yoke assembly (Fig. 1, focusing direction is the first direction; the yoke assembly is the U-shape means which houses the coil 9a);
- (k) as in claim 8, the movable element 2 is capable of being moved along the second direction by the second motive force acted on the yoke assembly (Fig. 1, tracking direction is the second direction);
- (1) as in claim 9, the first coil 9a is a focusing coil (Fig. 1);
- (m) as in claim 10, the second coil 10a is a tracking coil
  (Fig. 1);
- (n) as in claim 11, the yoke assembly comprises two yokes being mounted on two opposite sides of the movable element 2

respectively (Fig. 1; the first 2 yokes are the two U-shape means which houses the two coils 9a and 9b); and

- (o) as in claim 13, the movable element 2 comprises an optical lens 1 (Fig. 1).
- 4. Claims 14-16 have limitations similar to those treated in the above rejection, and are met by the reference as discussed above.
- 5. Claims 17 and 18 have limitations similar to those treated in the above rejection, and are met by the reference as discussed above.
- 6. Claims 19 and 20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kasahara et al. (U.S. Patent 5,206,762).

Kasahara teaches an objective lens driver having all the elements and means as recited in claim 19. For example, Kasahara teaches the following:

- (a) as in claim 19, a movable element 2 having an objective lens 1 attached comprises a first yoke assembly (Fig. 1; the first yoke is the U-shaped means which houses the coil 9a);
- (b) as in claim 19, a fixed element 8 adjacent to the movable element 2 configured to generate a magnetic force to move the movable element 2 toward a position (Fig. 1);

- (c) as in claim 19, the fixed element 8 comprising a second yoke assembly 11a; a magnetic assembly comprising one or more permanent magnet 13a connected to the second yoke assembly 11a configured to generate the magnetic field (Fig. 1);
- (d) as in claim 19, a first coil 9a configured to generate a first motive force in a first direction in response to the magnetic flux of the magnetic field (Figs. 1 and 3; the first coil is a focusing coil, column 3; lines 41 and 42); and
- (e) as in claim 19, a second coil 10a configured to generate a second motive force in a second direction in response to the magnetic flux of the magnetic field (Figs. 1 and 3; the second coil is a tracking coil, column 3; lines 41 and 42).
- 7. Claim 20 has limitations similar to those treated in the above rejection, and is met by the reference as discussed above.

8. Claims 21, 22 and 24 are rejected under 35 U.S.C. § 102(b) as being anticipated by Mitsumori et al. (U.S. Patent 5,535,059).

Mitsumori teaches an objective lens driver having all the elements and means as recited in claims 21 and 22. For example, Mitsumori teaches the following:

- (a) as in claim 21, a movable element 12 having an objective lens (Fig. 3; movable element is the lens holder;
- (b) as in claim 21, the movable element does not attach to a permanent magnet, a tracking coil, and a focusing coil (Fig. 3; coil bobbin 13 is not attached to the lens holder 12); and
- (c) as in claim 22, a fixed element 13 and 15 comprising the permanent magnet 23, the tracking coil 13b, and the focusing coil 13a so as to generate a magnetic flux which moves the movable element 12 (Fig. 3).
- 9. Method claim 24 is drawn to the method of using the corresponding apparatus claimed in claims 21 and 22. Therefore method claim 24 corresponds to apparatus claims 21 and 22 and is rejected for the same reason of anticipation as used above.

10. Claim 23 is rejected under 35 U.S.C. § 102(b) as being anticipated by Mitsumori et al. (U.S. Patent 5,535,059).

Mitsumori teaches an objective lens drive having all the elements and means as recited in claim 23. For example, Mitsumori teaches the following:

- (a) as in claim 23, a movable element 12 having an objective lens 11 and a yoke (Fig. 3; the yoke is the U-shaped means which houses the coil bobbin 13);
- (b) as in claim 23, a fixed element 13 and 15 adjacent to the movable element 12 to form a gap (Fig. 3); and
- (c) the fixed element 13 and 15 comprising a permanent magnet 23a, a tracking coil 13b, and a focusing coil 13a for generating a magnetic flux across said gap which moves said movable element (Fig. 4).

11. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231 Or faxed to:

(703) 872-9306 (for formal communications intended for entry. Or:

(703) 746-6909, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim CHU whose telephone number is (703) 305-3032 between 9:30 am to 6:00 pm, Monday to Friday.

KC 12/1403

Kim-Kwok CHU Examiner AU2653 December 12, 2003

(703) 305-3032

WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600